

# PHOTOCATALYST, ITS MANUFACTURE, AND PHOTOCATALYST-CONTAINING MOLDING AND ITS MANUFACTURE

**Publication number:** JP11290692

**Publication date:** 1999-10-26

**Inventor:** TOUGEDA HIROSHI; FUJITA KAZUTOMO; IMAIZUMI SHIGEMI; SUGAWARA YOSHINORI; HAYASHI KOJI; YAMASHITA NORIO; KAMIYAMA SHINICHI; FUTAMURA HIROSHI

**Applicant:** AGENCY IND SCIENCE TECHN; GIFU PREFECTURE

**Classification:**

- **international:** *C08J7/06; B01J21/06; B01J21/08; B01J35/02; B01J35/06; B01J37/02; C01G23/047; C08J3/20; C08J5/00; C08K9/02; C08L101/00; C09D1/00; D01F1/10; C08K9/02; C08L101/00; D01F1/10; C08J7/00; B01J21/00; B01J35/00; B01J37/00; C01G23/00; C08J3/20; C08J5/00; C08K9/00; C08L101/00; C09D1/00; D01F1/10; C08K9/00; C08L101/00; D01F1/10; (IPC1-7): C08K9/02; C08L101/00; D01F1/10; B01J35/02; B01J21/06; B01J21/08; B01J35/06; B01J37/02; C01G23/047; C08J3/20; C08J5/00; C08J7/06; C09D1/00*

- **European:**

**Application number:** JP19980093579 19980406

**Priority number(s):** JP19980093579 19980406

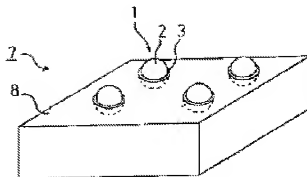
Report a data error here

## Abstract of JP11290692

**PROBLEM TO BE SOLVED:** To provide a photocatalyst which shows an improved durability and also a photocatalytic activity adjusted by adjusting the amount of photocatalyst particles to be borne by a porous body and, at the same time, has the pores of a ceramic coating film formed in various shapes to meet use applications and a method for manufacturing the photocatalyst as well as photocatalyst-containing moldings formed so that the photocatalyst can be applied for an increased number of use purposes and a method for manufacturing the moldings.

**SOLUTION:** This photocatalyst comprises photocatalyst particles of an anatase-type titanium oxide or a photocatalyst particle-bearing porous body, the surface of either of the particles or the porous body being covered with a ceramic coating film 3 which has almost uniform pores with 1 nm-10 μm pore dia. and is inactive for the photocatalyst. These pores are formed by thermally baking the coating film with an organic group, or dissolving the coating film containing a

chemically soluble ceramic or releasing a solvent with which the inside of the coating film is impregnated. The molding 7 containing the photocatalyst is manufactured by first kneading the photocatalyst 1 into a base material 8 and molding the kneaded product and dissolving the base material 8 and the ceramic coating film 3 which are present on the surface of the molding 7 and by exposing a part of the photocatalyst particles 2.



Data supplied from the **esp@cenet** database - Worldwide